PROCEEDINGS OF THE ACADEMY OF

collected some plants of Talinum teretifolium Pursh, on the serpentine rocks of Chester County, near Westchester, and transferred them to the small garden in the rear of my house in this city. The place chosen for them was close to the hydrant, where the very rich soil was constantly in a humid condition. The plants throve greatly, producing flowers and perfect fruit in abundance, and extending their tuber-like roots on all sides. In the early spring, observing these roots half-exposed on the surface of the ground. I pressed them down with my finger and eovered them with earth. The plants continued to thrive and multiply in this situation for several years, forming a thick mat of considerable extent, with no further care than the occasional covering of their roots in the spring. Subsequently they were superseded by Helonias bullata, for which their site was the best in my possession. This, however, bloomed but feebly and died in the early heat of the next summer.

When we consider that *Talinum teretifolium* grows only on dry rocks and, in Pennsylvania, is confined to the ledges and fissures of the serpentine, seeking, as it were by preference, the poorest and dryest soils, it affords a striking illustration of the truth of Mr. Meehan's remark that nature does not always put plants in places most suitable to their growth. What condition essential to the perpetuation of this plant exists in the arid serpentine, I am not able to state. It may concern the germination of its seed or the protection of its fleshy roots. It certainly does not govern its nutrition and fructification.

OCTOBER 14.

The President, Dr. RUSCHENBERGER, in the chair.

Twenty-seven members present.

On Distoma hepaticum.—Prof. LEIDY stated that he had received a letter from Prof. Gross, inclosing one from Dr. J. G. Kerr, of Canton, China, asking information in regard to a worm accompanying the letter. Dr. Kerr observes that the worm was vomited by a Chinese boy, aged fifteen years, and was brought to him an hour after its expulsion, when it was still alive. It had the appearance of a leech, was red in color, about an inch and a half long and three-fourths of an inch where widest. Dr. Kerr also states that a girl, of four years, of English parents, living in Canton, passed from the bowels at one time nine of these worms. With these exceptions, Dr. Kerr had not met with any one who had ever scen or heard of anything of the kind.

Prof. Leidy exhibited the specimen and expressed the opinion that the worm was a Liver-fluke, *Distoma hepaticum*, a rare parasite in the human subject, though common enough in cattle, espe-

NATURAL SCIENCES OF PHILADELPHIA.

cially sheep, in which it eaused the disease called "rot." The worm exhibits some differences from *D. hepaticum* as usually described, but perhaps not sufficient to characterize it as a distinct species. The specimen is preserved in strong alcohol, which no doubt has much contracted and reduced it in size, but it is yet rather larger than the size assigned to D. hepaticum. It is perfectly smooth throughout, and exhibits no trace of roughness to the integument. It is ovate-laneeolate in form, and gradually widens from the anterior to the posterior rounded extremity. The ventral acetabulum is twice the size of the mouth, and is situated about its own diameter behind it. The genital orifice with the exserted spiral penis is placed just in advance of the ventral acetabulum. The measurements of the worm in its present condition are as follows: Length 17 lines, width at the posterior third 7 lines, thickness near centre 1 line, diameter of mouth 2ths of a line, diameter of acetabulum #ths of a line.

Prof. Leidy further remarked that Dr. Keyser, of this city, the evening previously had brought to him for examination a worm, which was stated to have been removed from the eavity of the nose of a patient. He recognized the worm as a rat-tail lava, apparently of the genus *Eristalis*, and inquired of those members interested in entomology; if they had ever known this insect to be found as a parasite in the human body. Both Drs. LeConte and Horn said that they had never heard of this genus being parasitic.

Analysis of Chromite from Monterey County, California. By E. GOLDSMITH.—No analysis of chromite from this locality, so far as I am aware, has yet been published. Mine was undertaken with the view to ascertain what particular relation it might have to Trautwinite. As the last-named mineral is found on it, I presumed that the latter might have originated from the former. A chemical analysis only could decide the question. The process pursued was in all respects the same as that followed in my previous investigation of Trautwinite; not omitting great care in the preliminary mechanical separation of the two species from each other. The following table gives the result of both analyses and a comparison of the two minerals, together with the differences :—

Chromite.	Trautwinite.	Difference.
S. G. = 4.1647	3.505	
$\ddot{\mathrm{Si}} = 12.12 \text{ per cent.}$	21.78 per cent.	+ 9.66
$\ddot{\mathbf{e}}\mathbf{r} = 52.12$ ''	38.39 - **	-13.73
Fe = 15.24 "	13.29 ''	-1.95
$\frac{3}{2}$ = 2.18 "	0.81 "	- 1.37
$\dot{C}a = 5.65$ "	18.58 ''	+ 12.93
$\dot{M}g = 12.29$ "	7.88 "	<u> </u>

The formation of Trautwinite from chromite may be conceived to have taken place in accordance with the neptunian hypothesis, by the combination of silica and lime with the chromite, thus pro-

PROCEEDINGS OF THE ACADEMY OF

ducing the new compound; since both the oxides dissolve in water. When under these circumstances none of the constituents of the older mineral separates, it is self-evident that they will all present themselves in less quantity in the newly formed combination than in that from which it was derived. If a silicate of lime had simply been mixed with the Trautwinite, hydrochloric acid would have affected it. But the acids have no action upon it; hence it is very probable that the silica and lime combined with the chromite form the mineral which we call Trautwinite.

The death of Theodore F. Moss was announced.

October 21.

The President, Dr. RUSCHENBERGER, in the chair.

Twenty-nine members present.

Stibiaferrite, a new Mineral from Santa Clara County, California. By E. GOLDSMITH.—The mineral occurs on Stibnite, and enters the rock on both sides. The Stibnite between the two layers of the new mineral is $1\frac{1}{2}$ inch thick; and this appears to be the thickness of the vein at the spot whence the specimen was taken. The layers of the *Stibiaferrite* vary in thickness from a thin coating to about a quarter of an inch.

The most of it is amorphous. On examining a number of specimens, I observed some small cavities containing, I believe, the same substance in crystals. The crystals, when observed under a power of a $\frac{3}{4}$ lens, have the habitus of ortho-rhombie prisms. They are generally attached by one end, but a few extend to the other side of the cavity. The termination is the basal plane; I could not find a crystal having a finite pyramid; the infinite pyramids were those of the first and second order. The measurement of one of the erystals, which had a favorable position for observation, was performed with a goniometer (Leeson's) belonging to Mr. Clarenee S. Bement. Although I made several efforts to get the exact angles of the crystals, yet I wish it to be understood that the values obtained are only approximate.

The following are the indices or symbols of the observed forms according to the three authors :—

Miller .		100,	010,	001,	110.
Naumann		$\infty \widetilde{P}\infty$,	$\infty \overline{P} \infty$,	ΟР,	œΡ,
Dana .		iĭ,	iī,	О,	I.

The following angles represent normals:—

100.001				90 [⊃] 0′.
100.010				90 07.
001,010				90 - 0'.
110.110''	,			100 - 8'.
110, 110'				79 52'.
110,010				39 - 56'.
110,001	•		•	50 - 4'.

366